Chemical Facts and Phraseology.

Chemical Encyclopædia: an Epitomised Digest of Chemistry and its Industrial Applications. By C. T. Kingzett. Fourth edition. Pp. viii + 807. (London: Baillière, Tindall and Cox, 1928.) 35*s*. net.

THE subject of chemistry increases by leaps and bounds, not only owing to the continual discovery of new inorganic and organic substances, but also because of the introduction into the science of novel conceptions and ideas involving in many cases a new and highly technical terminology. Readers of current memoirs on chemical research often feel the need for a glossary of chemical terms owing to the rapidity with which the language of chemistry is changing. To the non-technical reader much of this literature appears to be a jargon which becomes ever less intelligible, but since chemistry has an educational aspect as well as many important industrial applications, it remains desirable that non-scientific members of the community should not be entirely ignorant of chemical facts and phraseology.

The veteran author of the "Chemical Encyclopædia," who as one of the original founders of the Institute of Chemistry did much to standardise the chemical profession in the early days, has striven with conspicuous success to compile an epitomised digest of pure and applied chemistry, this epitome being now in its fourth edition. At the outset this work, which then bore the title of "The Popular Chemical Dictionary," owed its origin to the circumstance that early in his career the author realised that the future welfare of the British Empire depends in the main on increased production within its boundaries by the utilisation of its boundless natural resources. Success along this line can only be attained by increased teaching and intensive application of chemical science. In presenting this enlarged and revised edition of his encyclopædia, the author contributes anew to the enlightenment of the public as regards the more salient topics of chemistry.

The work is much more than a dictionary of chemical terms, for in many instances important headings are expanded into concise essays. The first of these essays in alphabetical order is entitled "Alcohols" and occupies four pages. It is followed shortly by a discussion of alloys which fills three pages. In both instances the data supplied are informative and up-to-date. The study of colloids has been greatly extended during recent years, and the article "Colloid Chemistry" (5 pages), which summarises progress in this direction, includes a bibliography of relevant treatises. Each chemical element receives notice, the reference being proportional in length to the industrial importance of the element and its derivatives. Many subjects of outstanding interest, such as cellulose, dyes and dyeing, isotopes, lead tetra-ethyl, motor spirit, perfumes, poisons and antidotes, sugar, tar, and vitamins, are discussed.

Despite its wide scope, the book is remarkably free from errors and obscurities, and such as are encountered are readily recognised to be misprints. The author has exercised considerable discrimination in the selection of topics, and within a handy compass he has compressed a vast store of useful chemical information presented in a very attractive and readable form. Throughout the volume there are copious references to larger treatises and to original memoirs, so that in most cases the sources of more specialised knowledge are indicated.

The present edition is much larger and more comprehensive than the earlier ones, and should appeal not only to the professional chemist, but also to all who require a convenient desk book of information regarding chemistry and its industrial applications. G. T. M.

Biological Assay of Drugs.

Methods of Biological Assay. By Dr. J. H. Burn. (Oxford Medical Publications.) Pp. xvii + 126. (London: Oxford University Press, 1928.) 8*s*. 6*d*. net.

THE attention which has been directed during recent years to the determination of the potency of drugs for which no method of chemical analysis is at present available has necessitated both the introduction of new, or the adaptation of older, methods of biological assay as well as the preparation of stable standards of reference in terms of which the activity of the samples tested may be expressed. The importance of the accurate standardisation of a drug was shown when insulin was introduced into clinical therapeutics, and the work of the Health Section of the League of Nations and the passage of the Therapeutic Substances Act (1925) have directed further general attention to this subject.

The appearance of Dr. Burn's book at this moment is therefore most opportune, and its usefulness is enhanced by the fact that the author has strictly limited himself to the details of methods with which he is personally familiar. Thus, any worker unused to assaying a particular drug will